



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,372	12/29/2000	Jacob Christensen	42390P10205	1521

8791 7590 06/30/2004

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD, SEVENTH FLOOR  
LOS ANGELES, CA 90025

EXAMINER
----------

HYUN, SOON D

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/752,372

Applicant(s)

CHRISTENSEN, JACOB

Examiner

Soon D Hyun

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 3-8, 10-14, 17-19, 22-24, 27-29 and 31-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-8, 10, 11, 13, 14, 17-19, 22-24, 27-29 and 31-39 is/are rejected.
- 7) ☒ Claim(s) 12, 38, and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3-8, 10, 11, 13, 14, 17-19, and 22-24 are rejected under 35

U.S.C. 102(b) as being anticipated by IETF RFC 791.

Regarding claims 3-5, 17, 18, 22, and 23, IETF RFC 791 (RFC) discloses a method to manage packet fragmentation, comprising:

determining an operating parameter (a type of service), with the parameter to represent a priority level (normal or low delay, normal or high throughput, normal or high reliability), see page 11;

determining an operating status (control flags in flags field) for the operating parameter, with the operating status to comprise active (a bit indicating may fragment) or de-active (a bit indicating don't fragment), see page 12; and

performing packet fragmentation substantially in accordance with the operating status.

Regarding claims 6-8, 13, 14, 19, and 24, RFC further discloses a field for a Time to Live for the packet, see page 10.

Art Unit: 2663

Regarding claims 10 and 11, refer to the discussion for the claim 3, each packet comprises an operating parameter identifier (D, T, R) for the service of type.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-29 and 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al (U.S. patent No. 5,541,919).

Regarding claim 27, Young et al (Young) discloses a method to perform fragmentation, comprising:

determining an operating parameter for a bitstream (available bit-rate of the out put channel for the bitstream);

determining a packet size using the operating parameter; and

performing packetizing of the bitstream based on the packet size, wherein the operating parameter comprises a connection speed (available bit-bit rate of the output channel), see col. 2 line 48-col. 8, line 25.

However, Young differs from the present application in that Young teaches packet segmentation of a bit stream, while the present application teaches fragmentation of a packet. Those of skill in the art would appreciate that the method of Young could be applied to fragmentation of a packet without deviating

Art Unit: 2663

from the broad principal of the invention when the bit stream has a packet format and the packet size is long enough to cause transmission delay. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate fragmentation of a packet into Young when the bit stream has the packet format.

Regarding claims 28 and 29, Young further discloses that the packet fragment size increases when the connection speed increases and the packet fragment size decreases when the connection speed decreases.

Regarding claims 31-32, and 34, Young further discloses that the operating parameter comprises a priority level and the packet fragment size decreases when the priority level increases and the packet fragment size increases when the priority level decreases.

Regarding claim 33, Young further discloses that evaluating whether the operating parameter has been determined within a limited time period, see equations EQ 1-3.

Regarding claims 35 and 36, refer to discussion for the claims 28, 29, 31, and 32.

Regarding claim 37, refer to discussion for the claim 33.

***Allowable Subject Matter***

3. Claims 12, 38, and 39 are being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

4. Applicant's arguments filed 04/09/2004 for claims 3-8, 10, 11, 13, 14, 17-19, and 22-24 have been fully considered but they are not persuasive.

Applicant argues that "the Type of Service parameters and Control Flag parameters are independent parameters that may be set without regard to each other. Consequently, RFC fails to disclose all the elements." Examiner disagrees.

RFC 791 teaches that all the control information in a header of a datagram is set for the data gram, i.e., the Type of Service parameters and Control Flag parameters are set for the datagram. Therefore, Examiner believes that the Type of Service parameters are set for Control Flag parameters or vice versa.

Furthermore, the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the two parameters are independent) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments with respect to claims 27-29 and 31-37 have been considered but are moot in view of the new ground(s) of rejection as discussed above.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is

Art Unit: 2663

(703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

6. Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450


Alexandria, VA 22313-1450

Or faxed to: 703-872-9306 for formal communications intended for entry with a label of "OFFICIAL" and for informal or draft communications with a label of "PROPOSED" or "DRAFT" (attn: Art Unit 2663, Soon-Dong Hyun).



S. Hyun

06/24/2004



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600